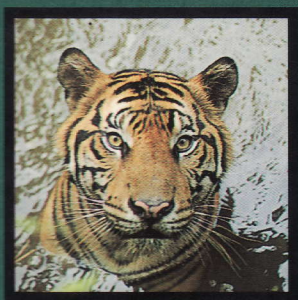




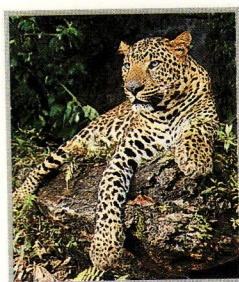
INDONESIAN HERITAGE

Wildlife



ARCHIPELAGO PRESS

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Asep S. Adhikerana & John N. Mksic

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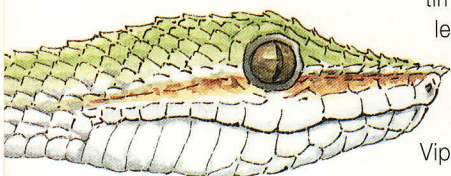
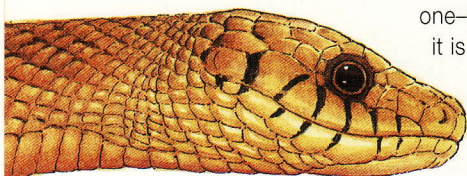
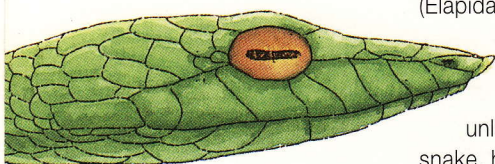
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Snakes

Some of the largest snakes in the world, both poisonous and non-poisonous, are found in Indonesia. Many species are restricted to a single or small group of islands within the Archipelago. People are often wary of snakes and, although a snake will rarely attack a person, it is sensible to treat all snakes as poisonous if one is uncertain of the species. This fear of snakes has often led to them being killed on sight, which is unfortunate as many species are beneficial in reducing the number of agricultural pests, particularly rodents.

(Top to bottom)
Head of the mangrove cat snake (*Boiga dendrophila*), an eager predator of lizards, bats and birds. Head of Oriental whip snake (*Ahaetulla prasina*) measuring about two metres long and which feeds on small invertebrates such as frogs and lizards. Head of the Asian rat snake (*Pythas mucosus*). Head of Wagler's pit viper (*Tropidolaemus wagleri*). This viper measures about one metre long and inhabits forests and mangroves.



Enchanting Cobras

Poisonous snakes are a minority in Indonesia and, as in most other countries, the incidence of snake bite is almost entirely restricted to people living in and around forest and scrubland. The most common poisonous snakes found in Indonesia are the southern spitting cobra (*Naja sputatrix*) which occur from Java to Alor, and the equatorial spitting cobra (*N. sumatrana*) in Borneo and Sumatra. Cobras are the easiest snakes to recognise as they rise up when threatened, spreading their long, thin neck ribs to form a distinctive hood around the head. Their poison is neurotoxic; it affects the nerves of the victim and death can be fairly rapid if the patient does not receive attention once bitten.

The world's largest poisonous snake is the king cobra (*Ophiophagus hannah*), which can reach a length of 5.8 metres. A specialised snake-eater, this is a shy forest-dwelling species which only attacks humans when provoked. Its large venom glands contain enough poison to kill an elephant. The king cobra is the only snake known to make a nest of soil and leaf litter, gathering fallen leaves from the forest floor. The nest is about 30 centimetres high and may contain 20 to 40 eggs. These are guarded by the mother until they hatch.

Colourful Coral Snakes

The bright colours of coral snakes' skins, which have probably evolved as a warning to potential predators, are closely related to the cobra family (Elapidae). The blue coral snake (*Maticora bivirgata*) and the striped coral snake (*M. intestinalis*) are deadly poisonous, although the latter is very small (54 centimetres long) and is unlikely to kill an adult human. The blue coral snake, however, may reach a length of up to 1.5 metres and has a venom gland that measures one-third of the body length. Fortunately for humans, it is a resident of dense forests, is shy, and feeds mainly on other snakes. The similarity between the harmless eight-lined kukri snake (*Oligodon octolineatus*) and the striped coral snake is remarkable — even a biologist can have a hard time telling the two species apart. Predators which leave the coral snake alone presumably do not disturb its mimic.

Camouflaged Hunters

Vipers bear a single pair of long hollow fangs on the



TINY TRAVELLER

No account of Indonesian snakes would be complete without mention of the tiny blind snake (*Ramphophyphlops braminus*), sometimes known as the two-headed snake because the head and tail are difficult to distinguish. This species reproduces parthenogenetically by simple division of the egg cells, without fertilisation: no male has ever been found. Living in soils and drains, the blind snake has a worldwide distribution.



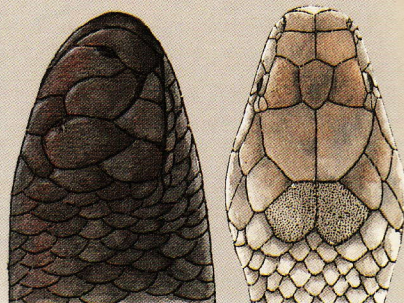
upper jaw. All vipers possess haematotoxic venom which acts on the victim's blood. All species are active hunters that strike their prey quickly, injecting a small amount of lethal toxins in the process. Their main prey includes lizards, small birds and mammals. Indonesia has a large number of vipers, including the common pit viper (*Calloselasma rhodostoma*) which is an aggressive species. Although bites from this species are common, they are fortunately not usually fatal. Unlike most vipers, which produce live young, the common pit viper lays eggs and guards them.

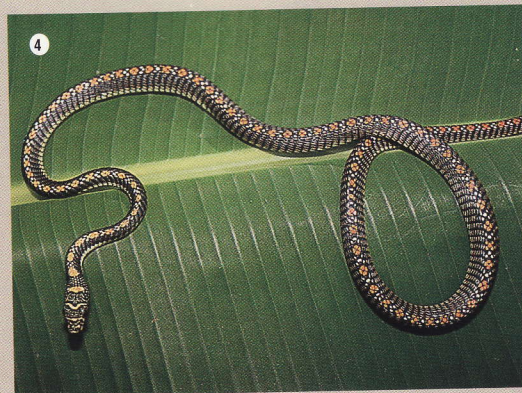
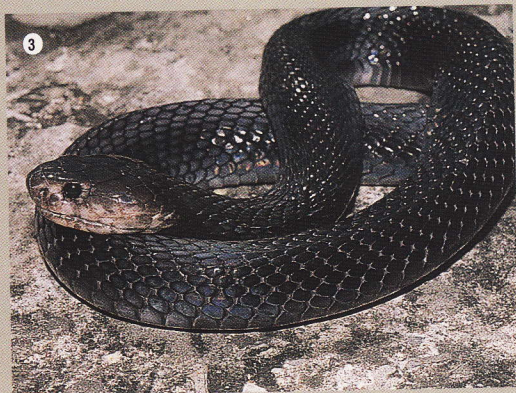
Other pit vipers, such as the generally arboreal white-lipped viper (*Trimeresurus albolabris*), the Bornean flat-nosed viper (*T. borneensis*) and Wagler's pit viper (*Tropidolaemus wagleri*) are not as dangerous. Most of these species are sluggish animals that are generally non-aggressive, although they should be treated with caution. The bite, though excruciatingly painful, is seldom fatal.

The largest of the land vipers is Russell's viper (*Vipera russellii*) which shows a highly disjunct distribution within the broad range of this species — from Pakistan to Java.

Head of blind snake (*Ramphophyphlops braminus*).

Head of an equatorial spitting snake (*Naja sumatrana*).





Goliaths of the Snake World

One of the largest snakes in the world, the reticulated python (*Python reticulatus*), occurs in Indonesia. This species can reach 10 metres in length — similar to, although lighter than, the South American anaconda. This species is more slender than any other python, but is nonetheless a formidable snake because of its size and vicious temperament. It occurs in undisturbed and secondary forests, plantations and even in villages and towns, feeding on pigs, deer, pangolins, monkeys, civet cats, rats, domestic cats, dogs, birds and even the occasional hapless human. Unlike most other snakes which rely on poisonous injections to suppress their prey, a python suffocates its prey by coiling its body around the helpless animal. Female reticulated pythons lay a variable number of eggs, ranging from 8 to 100. Females brood the eggs for about 100 days, leaving the nest only to drink or to shed their skin. Large numbers of this species are caught each year in Indonesia to supply the Asian python skin trade.

Water-loving Snakes

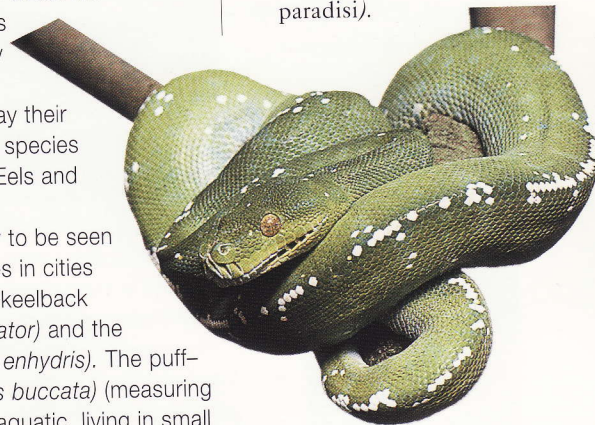
The Asian wart snakes are an unusual group of snakes commonly found in coastal streams. Most

species are easily recognised: the banded file snake (*Acrochordus granulatus*), for example, resembles an overstuffed stocking, while the elephant trunk snake (*A. javanicus*) actually looks like a dismembered elephant's trunk. Both snakes are fish-eating species and their fat bodies make movements on land very laborious and tedious.

The long coastline of Indonesia with its shallow seas and coral reefs provides suitable habitat for many kinds of sea snakes, all of which are poisonous. Although sometimes abundant, sea snakes are rarely aggressive. Only the sea kraits (*Laticauda*) venture on land to lay their eggs on rocky islands; all other species give birth to live young at sea. Eels and fish eggs constitute their diet.

Two snakes which are likely to be seen in drains and other water bodies in cities and villages are the checkered keelback water snake (*Xenochrophis piscator*) and the rainbow water snake (*Enhydryis enhydryis*). The puff-faced water snake (*Homalopsis buccata*) (measuring about 1.2 metres long) is also aquatic, living in small rivers, ponds, swamps and flooded rice fields. It feeds on small fish, frogs and crustaceans, and produces 9 to 21 live young in a clutch.

- ① Asian rat snake (*Coluber korros*).
- ② Wagler's pit viper (*Tropidolaemus wagleri*).
- ③ Equatorial spitting snake (*Naja sumatrana*).
- ④ Red-spotted flying snake (*Chrysocopele paradisi*).



An adult green python (*Chondropython viridis*) and its young which are yellow.

« A rock python (*Python molurus*) strangles its prey to death before swallowing it up whole. Although dangerous to human beings, it prefers small warm-blooded animals.

